

### Subpart D—Unlicensed Personal Communications Service Devices

SOURCE: 58 FR 59180, Nov. 8, 1993, unless otherwise noted.

#### § 15.301 Scope.

This subpart sets out the regulations for unlicensed personal communications services (PCS) devices operating in the 1910–1930 MHz and 2390–2400 MHz frequency bands.

[60 FR 13073, Mar. 10, 1995]

#### § 15.303 Definitions.

(a) *Asynchronous devices*. Devices that transmit RF energy at irregular time intervals, as typified by local area network data systems.

(b) *Coordinatable PCS device*. PCS devices whose geographical area of operation is sufficiently controlled either by necessity of operation with a fixed infrastructure or by disabling mechanisms to allow adequate coordination of their locations relative to incumbent fixed microwave facilities.

(c) *Emission bandwidth*. For purposes of this subpart the emission bandwidth shall be determined by measuring the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, that are 26 dB down relative to the maximum level of the modulated carrier. Compliance with the emissions limits is based on the use of measurement instrumentation employing a peak detector function with an instrument resolutions bandwidth approximately equal to 1.0 percent of the emission bandwidth of the device under measurement.

(d) *Isochronous devices*. Devices that transmit at a regular interval, typified by time-division voice systems.

(e) *Noncoordinatable PCS device*. A PCS device that is capable of randomly roaming and operating in geographic areas containing incumbent microwave facilities such that operation of the PCS device will potentially cause harmful interference to the incumbent microwave facilities.

(f) *Peak transmit power*. The peak power output as measured over an interval of time equal to the frame rate or transmission burst of the device

under all conditions of modulation. Usually this parameter is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used.

(g) *Personal Communications Services (PCS) Devices [Unlicensed]*. Intentional radiators operating in the frequency bands 1910–1930 MHz and 2390–2400 MHz that provide a wide array of mobile and ancillary fixed communication services to individuals and businesses.

(h) *Spectrum window*. An amount of spectrum equal to the intended emission bandwidth in which operation is desired.

(i) *Sub-band*. For purposes of this subpart the term sub-band refers to the spectrum allocated for isochronous or asynchronous transmission.

(j) *Thermal noise power*. The noise power in watts defined by the formula  $N=kTB$  where  $N$  is the noise power in watts,  $K$  is Boltzmann's constant,  $T$  is the absolute temperature in degrees Kelvin (e.g., 295 °K) and  $B$  is the emission bandwidth of the device in hertz.

(k) *Time window*. An interval of time in which transmission is desired.

[58 FR 59180, Nov. 8, 1993, as amended at 59 FR 32852, June 24, 1994; 60 FR 13073, Mar. 10, 1995]

#### § 15.305 Equipment authorization requirement.

PCS devices operating under this subpart shall be certified by the Commission under the procedures in subpart J of part 2 of this chapter before marketing. The application for certification must contain sufficient information to demonstrate compliance with the requirements of this subpart.

#### § 15.307 Coordination with fixed microwave service.

(a) UTAM, Inc. is designated to coordinate and manage the transition of the 1910–1930 MHz band from the Private Operational-Fixed Microwave Service (OFS) operating under part 101 of this chapter to unlicensed PCS operations,